Missouri Assessment Program
Spring 2006

Mathematics

Released Items

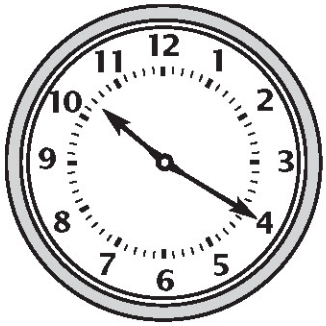
Grade 4

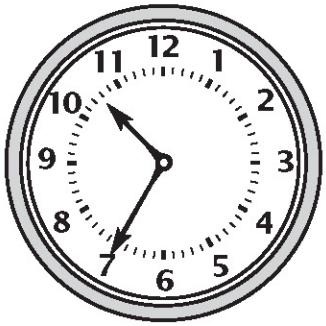
The McGraw-Hill Companies

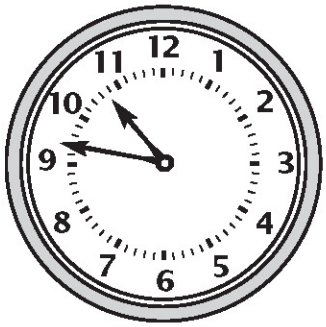
CTB McGraw-Hill

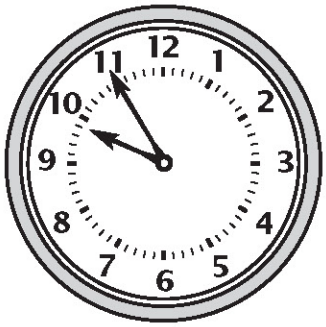
Developed and published under contract with the Missouri Department of Elementary and Secondary Education by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California 93940-5703.

1 Marty leaves his house at 10:47 A.M. to walk to the store. Which clock below shows the time Marty leaves?

○ 

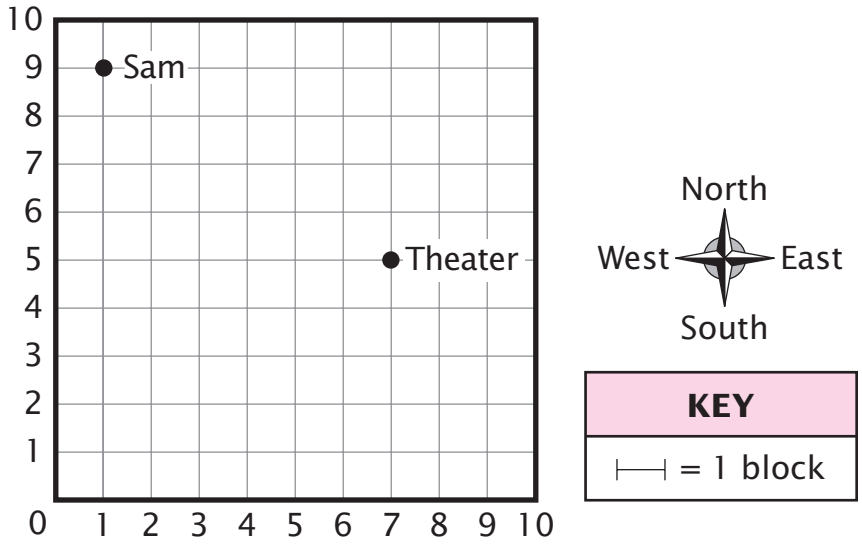
○ 

○ 

○ 

DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ←

3 Study the map below.



Which of these directions can Sam follow to walk to the theater?

- ○ Go east 6 blocks and south 4 blocks.
- ○ Go south 4 blocks and east 5 blocks.
- ○ Go west 6 blocks and south 5 blocks.
- ○ Go south 5 blocks and east 6 blocks.

4 Trevor had cookies that he wanted to put into bags. He wanted to put 4 cookies into each bag. Trevor used the number sentence below to find the number of bags he would need.

$$56 \div 4 = 14$$

In the number sentence, what does the number 56 represent?

- ○ the number of bags
- ○ the number of cookies
- ○ the number of students buying cookies
- ○ the number of cookies in each bag

Go On ▶

5 Study the information below.

- Ella has 10 yellow jellybeans and 12 red jellybeans.
- Jane has twice as many yellow jellybeans as Ella.
- Jane has three times as many red jellybeans as Ella.

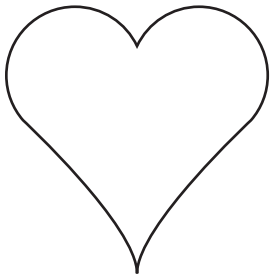
On the line below, write a number sentence to find the number of Jane's yellow jellybeans.

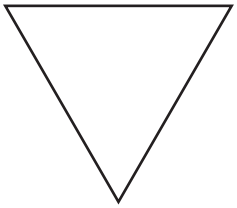
_____

On the line below, write a number sentence to find the number of Jane's red jellybeans.

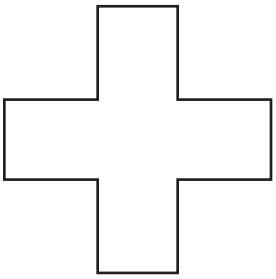
_____

6 Which figure below does ***not*** have a line of symmetry?

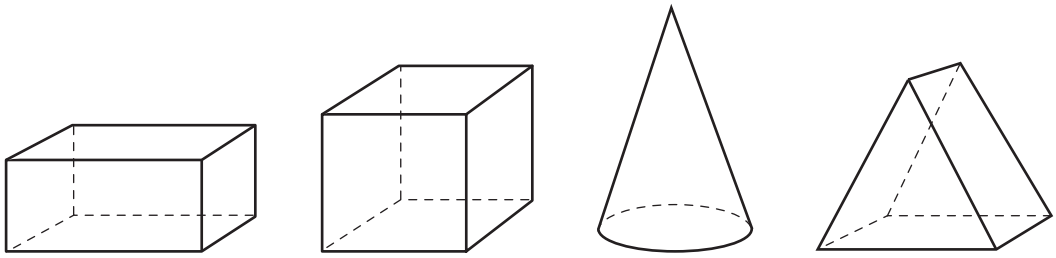
○ 

○ 

○ 

○ 

7 Study the 3-dimensional shapes below.

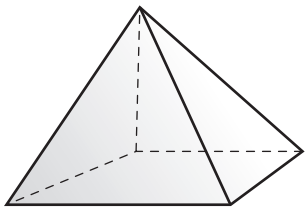


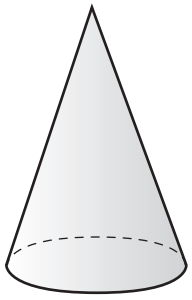
How many of these 3-dimensional shapes have only flat faces and straight edges?

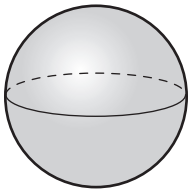
- ○ 1
- ○ 2
- ○ 3
- ○ 4

8 Cameron drew a figure with one vertex, one curved face, and at least one flat face. Which figure did Cameron draw?

○ 

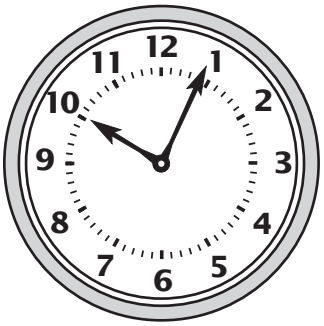
○ 

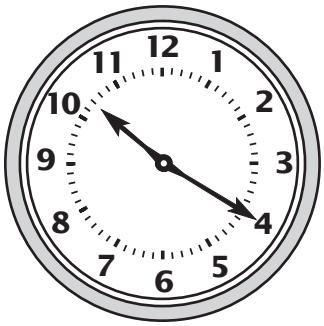
○ 

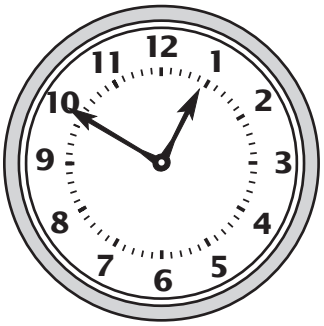
○ 

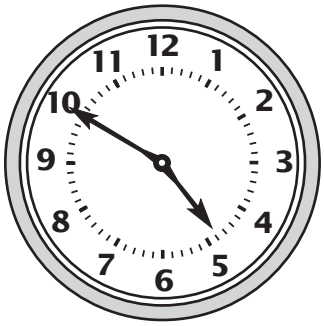
Go On ▶

9 Which of these clocks shows 10:04?

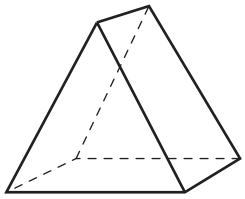
○ 

○ 

○ 

○ 

10 Study the shape below.



Which of these describes the faces of the shape?

○ rectangles only

○ triangles only

○ rectangles and squares

○ triangles and rectangles

DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ←

11 Nathan emptied his coin jar and counted the number of coins shown below.

10 quarters

12 nickels

11 dimes

17 pennies

In the box below, show your work to find the ***total*** value of the coins and write your answer on the line.

$_____

DO NOT WRITE HERE ➡

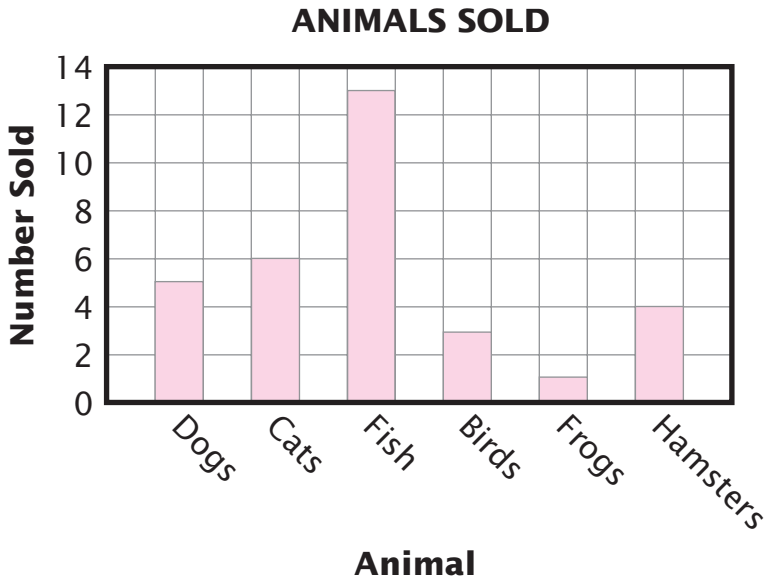
DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

Go On ▶

12 The bar graph below shows the number of animals sold at the pet store during the week.

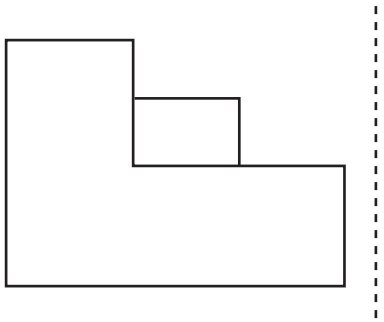


Which of these statements is ***true*** from the information in the graph?

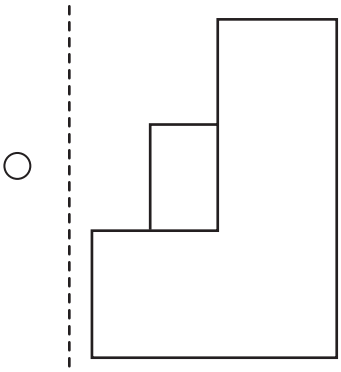
- ○ Fewer cats were sold than birds.
- ○ The same number of dogs and cats were sold.
- ○ More cats were sold than all other animals.
- ○ More four-legged animals were sold than fish.

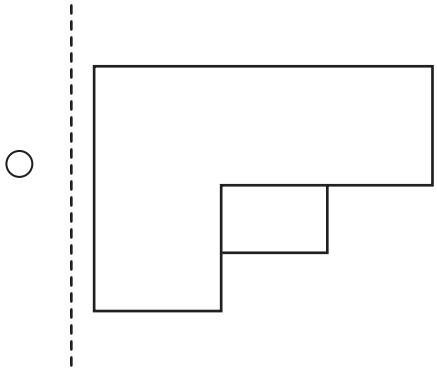
DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ←

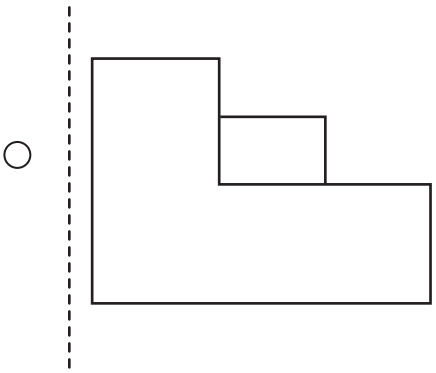
13 Study the figure below.

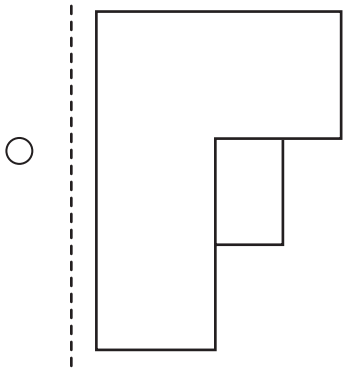


Which of these is a slide of the figure across the dotted line?

○ 

○ 

○ 

○ 

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

Go On ▶

14 The table below shows the amount of time Madison spends exercising each day. She will continue this pattern of exercise for seven days.

EXERCISE TIME

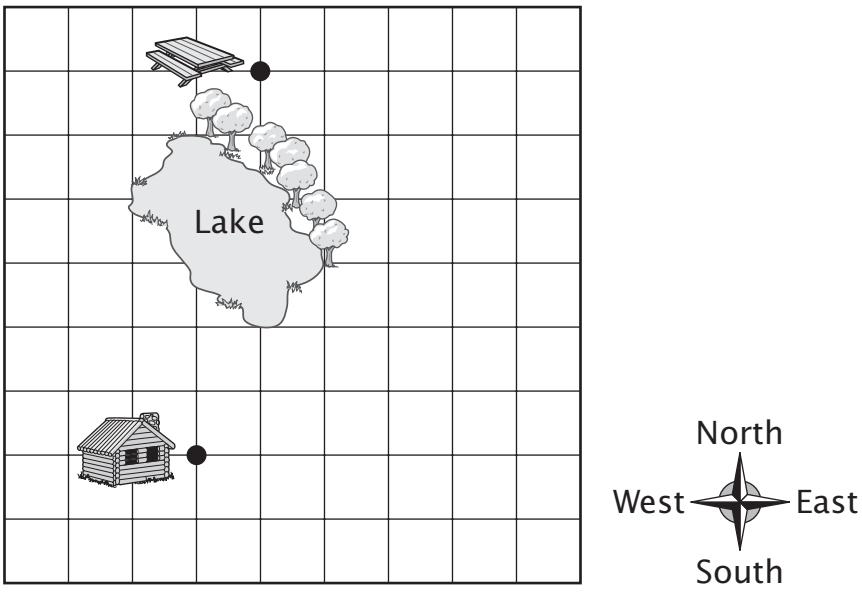
Day	Number of Minutes
1	15
2	25
3	35

How many minutes will Madison exercise on ***Day 7***? In the box below, show your work and write your answer on the line.

_____ minutes

DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ← DO NOT WRITE HERE ←

15 Study the map below.



Which directions could Ann follow to walk from the cabin to the picnic table?

- ○ 1 north, 1 east, 4 north, 1 west
- ○ 1 north, 3 east, 5 north, 2 west
- ○ 2 east, 5 south, 3 west, 1 south
- ○ 2 west, 3 north, 2 east, 2 north

16 Study the number pattern below.

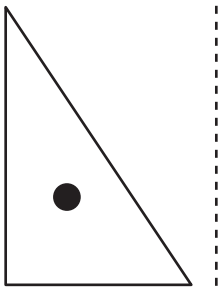
195, 190, 185, 180, 175, _____

What rule is used to find the next number in the pattern?

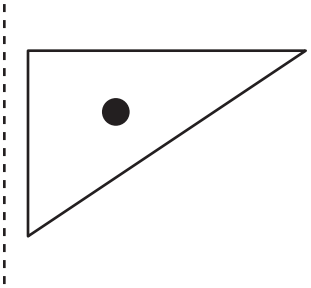
- ○ add 10
- ○ subtract 15
- ○ add 5
- ○ subtract 5

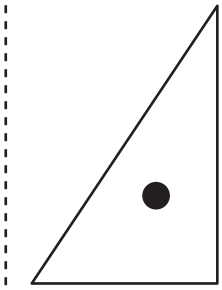
Go On ▶

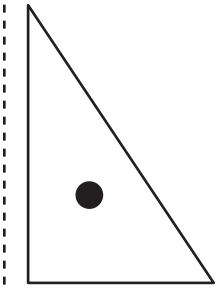
17 Study the figure below.

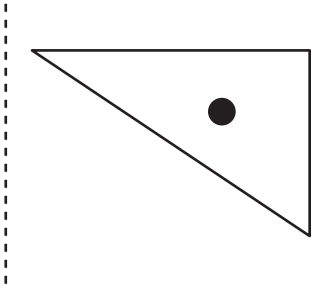


Which of these shows a flip of the figure over the dotted line?

○ 

○ 

○ 

○ 

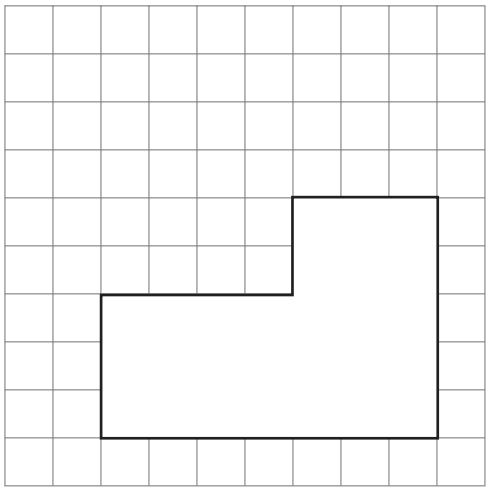
DO NOT WRITE HERE ←

DO NOT WRITE HERE ←

DO NOT WRITE HERE ←

DO NOT WRITE HERE ←

18 Study the figure below.



KEY
= 1 Square Unit

What is the area of the figure?

- ○ 15 square units
- ○ 21 square units
- ○ 27 square units
- ○ 35 square units

19 Study the number pattern. On the lines below, write the next two numbers that continue the pattern.

1, 2, 4, 7, ____, ____

On the lines below, write the rule for the pattern.

_____

_____

_____

DO NOT WRITE HERE

DO NOT WRITE HERE

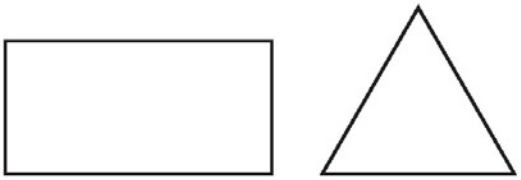
DO NOT WRITE HERE

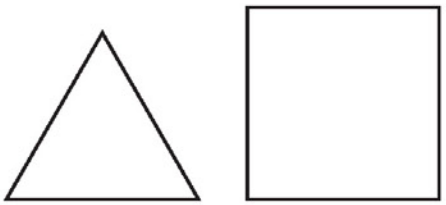
DO NOT WRITE HERE

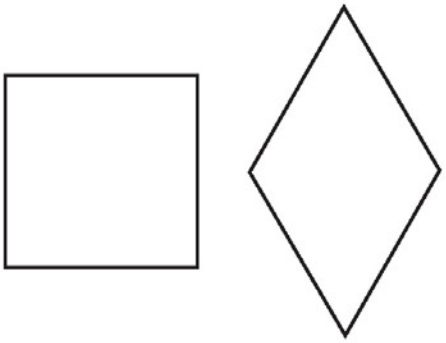
Go On ▶

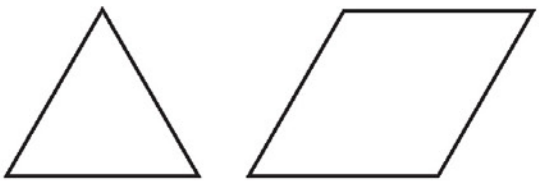
21 Study the figure below.

Which 2 shapes can be used to create the figure?

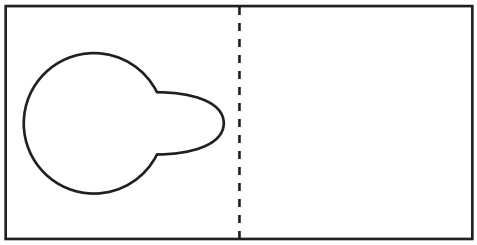
○ 

○ 

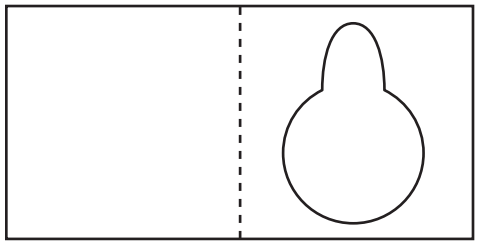
○ 

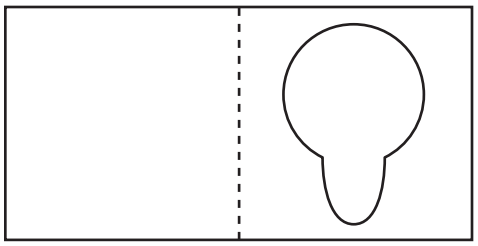
○ 

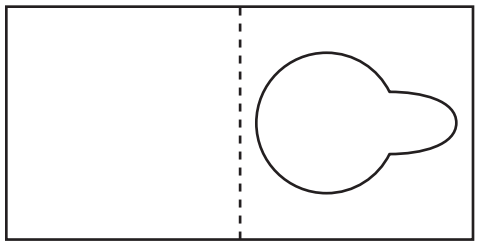
22 Study the shape below.

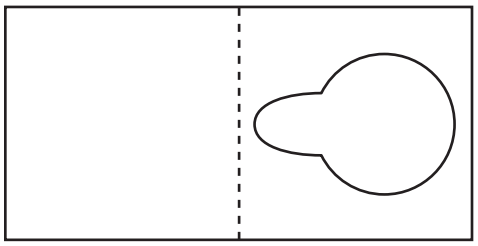


Which of these is a flip of the shape over the dotted line?

○ 

○ 

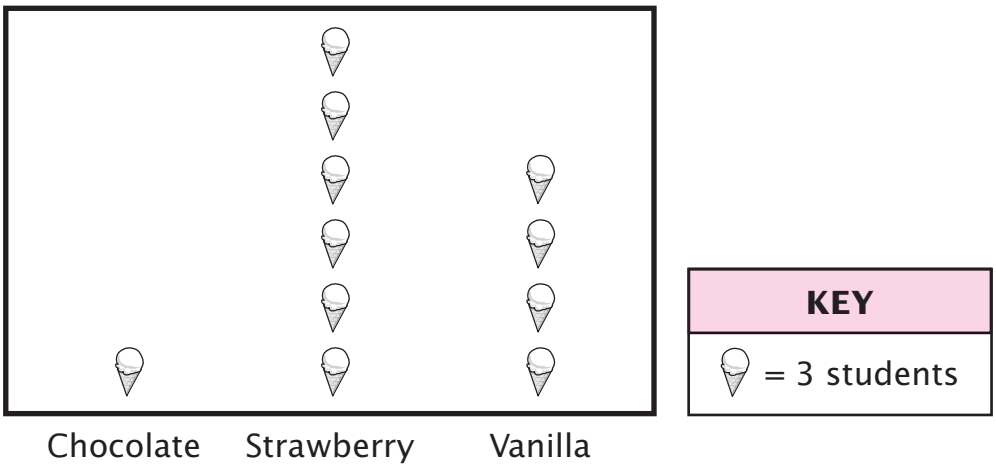
○ 

○ 

Go On ▶

23 Ms. Jones took a survey of her class to find their favorite ice cream flavors. The pictograph below shows the results.

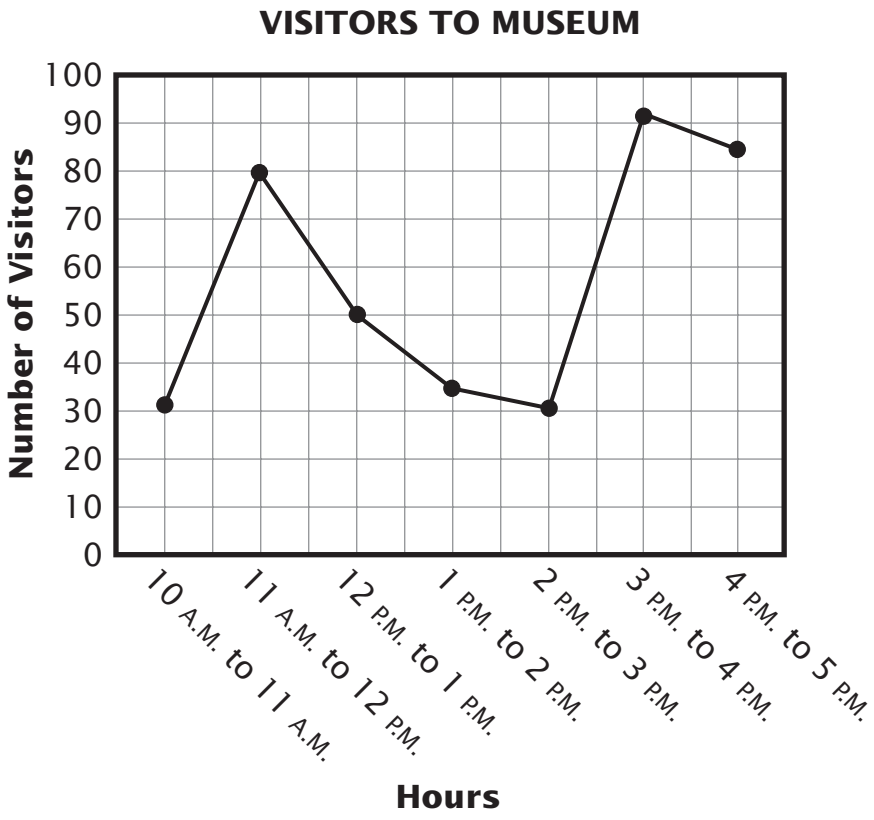
FAVORITE FLAVORS



How many more students chose strawberry as their favorite flavor rather than chocolate ***and*** vanilla combined? In the box below, show your work and write your answer on the line.

_____ students

24 The line graph below shows the average number of visitors each hour to the museum.



The museum wants to have a 2-hour class during the ***least*** busy time of the day. Which of these would be the least busy time for the class?

- ○ 10:00 A.M. to 12:00 P.M.
- ○ 1:00 P.M. to 3:00 P.M.
- ○ 2:00 P.M. to 4:00 P.M.
- ○ 3:00 P.M. to 5:00 P.M.

DO NOT WRITE HERE ➡ DO NOT WRITE HERE ➡ DO NOT WRITE HERE ➡ DO NOT WRITE HERE ➡

Go On ▶

25 The class was asked to ***estimate*** the number sentence below.

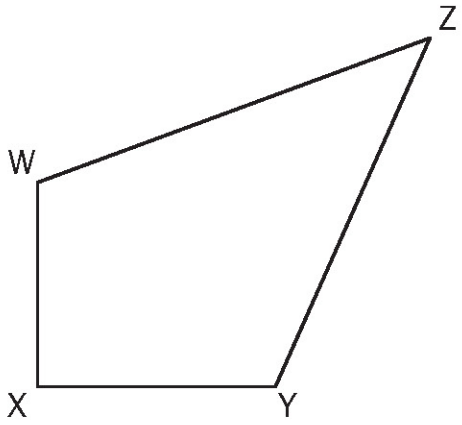
$$12 \times 11 = ?$$

Study what two students said.

In the box below, explain how Nikko ***estimated*** that the answer is more than 100.

In the box below, explain how Juanita used ***estimation*** to find that the answer is about 120.

26 Study the figure below.



Which angle in the figure looks like it measures 90°?

- ○ ∠W
- ○ ∠X
- ○ ∠Y
- ○ ∠Z

DO NOT WRITE HERE ➡

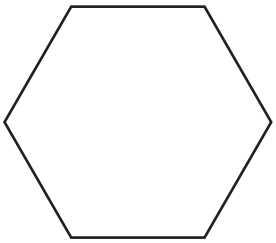
DO NOT WRITE HERE ➡

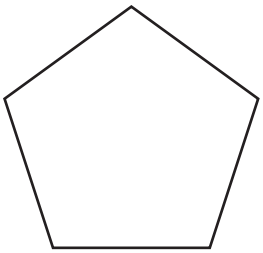
DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

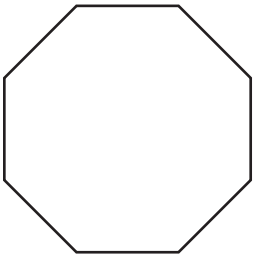
Go On ▶

29 Which shape has ***no*** parallel sides?

○ 

○ 

○ 

○ 

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

DO NOT WRITE HERE ➡

Go On ▶

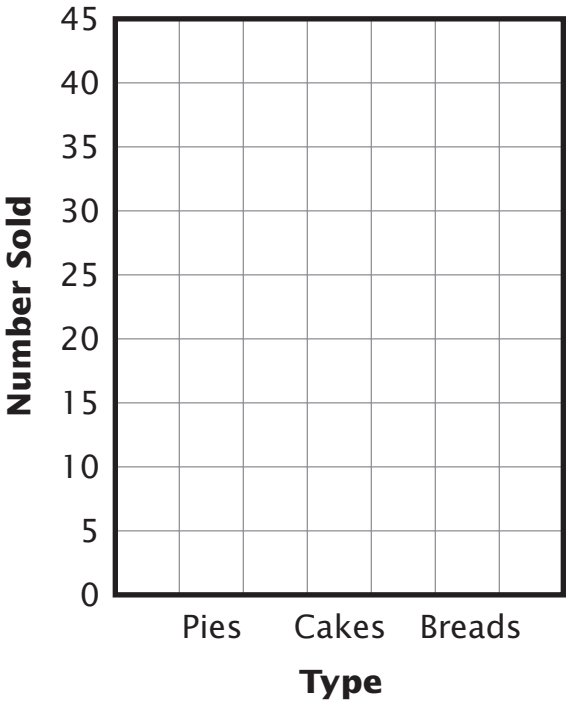
30 A baker recorded the numbers of each item sold during five days, as shown in the table below. Complete the table to show the totals sold.

BAKERY

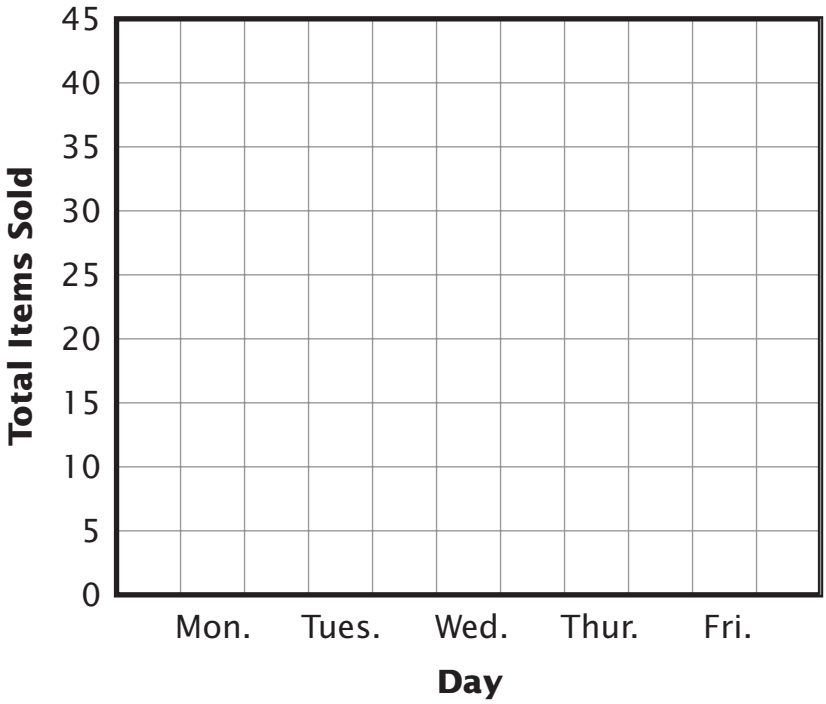
Day	Pies	Cakes	Breads	Total Items Sold
Monday	4	6	8	
Tuesday	3	4	6	
Wednesday	10	13	15	
Thursday	3	5	6	
Friday	5	9	7	
Total				

The baker wants to display the data in 2 different ways. Use the data from the table to complete Bar Graph A and Bar Graph B below.

BAR GRAPH A



BAR GRAPH B



Look at the table and Bar Graph B. What information is shown in the table, but not shown in Bar Graph B ? On the lines below, explain your answer.

The bakery had a sale one day during the week. On which day of the week do you think the bakery had a sale? On the lines below, explain your answer using the information from the graphs.

Look at Bar Graph A. On the lines below, write a question that can be answered ***only*** from the information in Bar Graph A.

DO NOT WRITE HERE

DO NOT WRITE HERE

DO NOT WRITE HERE

DO NOT WRITE HERE

STOP